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(19) **United States**(12) **Patent Application Publication**  
**Dimsdale et al.**(10) **Pub. No.: US 2003/0001835 A1**(43) **Pub. Date: Jan. 2, 2003**(54) **INTEGRATED SYSTEM FOR QUICKLY AND  
ACCURATELY IMAGING AND MODELING  
THREE-DIMENSIONAL OBJECTS**PCT/US97/06793, filed on Apr. 24, 1997, which is a  
continuation-in-part of application No. 08/638,961,  
filed on Apr. 24, 1996, now Pat. No. 5,988,862.(76) Inventors: **Jerry Dimsdale, Berkeley, CA (US);  
Jonathan Apollo Kung, Berkeley, CA  
(US)**Correspondence Address:  
**STALLMAN & POLLOCK LLP**  
Suite 290  
121 Spear Street  
San Francisco, CA 94105 (US)(21) Appl. No.: **10/079,007**(22) Filed: **Feb. 20, 2002****Related U.S. Application Data**(60) Division of application No. 09/177,777, filed on Oct.  
23, 1998, which is a division of application No.**Publication Classification**(51) **Int. Cl.<sup>7</sup> ..... G06T 15/00**(52) **U.S. Cl. .... 345/419**(57) **ABSTRACT**

An integrated system generates a model of a three-dimensional object. A scanning laser device scans the three-dimensional object and generates a point cloud. The points of the point cloud each indicate a location of a corresponding point on a surface of the object. A first model is generated, responsive to the point cloud, that generates a first model representing constituent geometric shapes of the object. A data file is generated, responsive to the first model, that can be inputted to a computer-aided design system.

